1 Claim 1. through Claim 18. (cancelled)

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- 1 Claim 19. (new) A classification and management system for patients with
- 2 lower extremity arterial occlusive disease comprising a network of remotely
- 3 located computers from healthcare facilities, an evaluating authority and
- 4 accredited laboratory integrated to implement the steps on-line of:
 - entering and storing collected patient data of physically observable conditions of the patient's lower extremities and noninvasive arterial pressure and blood flow data in the memory of a computer at the healthcare facility,
 - transmitting said collected patient data from the healthcare facility computer to a computer at an evaluating authority,
 - receiving and storing the collected patient data in the computer at the
 evaluating authority to review and compare said collected patient data
 against a medically accepted set of disease specific criteria at the
 evaluating authority to classify patients as "potentially at risk" and "not
 at risk" of developing complications of arterial occlusive disease,
 - entering and storing patient classification data in the memory of the computer at the evaluation authority,
 - transmitting said patient classification data from the evaluating authority computer to the computer at the healthcare facility,
 - receiving and storing the patient classification data in the computer at the healthcare facility,
 - transmitting the "potentially at risk" patient data from the healthcare facility to the accredited laboratory,
 - entering and storing the "potentially at risk" patient data in a computer at an accredited laboratory to evaluate those "potentially at risk" patients at the accredited laboratory against medically accepted criteria,
 - entering and storing the data results of said noninvasive vascular evaluation in the memory of the computer at the accredited laboratory,
 - transmitting said stored data results from the accredited laboratory computer to the computer at the evaluating authority for final classification,
- receiving and storing the stored data results in the computer at the evaluating authority to classify each patient at the evaluating authority

against medically accepted criteria as "at risk" or "not at risk" of developing arterial occlusive disease,

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- entering and storing patient classification in the memory of the computer at the evaluation authority,
- transmitting said "at risk" or "not at risk" patient final classification from the evaluation computer to the computer at the healthcare facility,
 - entering and storing said "at risk" or "not at risk" patient final
 classification at the healthcare facility computer and transmitting data
 from the healthcare facility computer database having a final
 classification of "at risk" for critical ischemia with associated extremity
 lesions and patients with noninvasive evidence of severe ischemia to a
 vascular surgery facility for vascular surgical assessment to determine
 whether revascularization is necessary,
 - reviewing the data and assessing such "at risk" patients against medically accepted criteria as "clinical indication for operation" or "no indication for operation" at the vascular surgery facility,
 - electing revascularization and periodic management system evaluation at the healthcare facility or routine wound care and periodic revaluation at the healthcare facility by patients assessed as "clinical indication for operation",
 - monitoring patients assessed as "no indication for operation" by the healthcare facility with increased precautions to monitor for detection of any visible deterioration of the patient's lower extremities that would require reassessment,
 - referring patients having ulcers, pain or gangrene at the time of "no indication for operation" assessment for reassessment,
 - referring patients classified as "no indication for operation" that develop ulcers, pair and/or gangrene to the vascular surgery facility for reassessment.
 - reassessing the referred patient at the vascular surgery facility against medically accepted criteria as "no indication for operation" or "clinical indication for operation",
 - entering and storing the reassessment in a memory of a computer at the vascular surgery facility,
- transmitting the reassessment of "no indication for operation" or "clinical indication for operation" from the vascular surgery facility computer to

the computer at the evaluating authority for reevaluation as "no indication for operation" or "clinical indication for operation",

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- transmitting the reevaluation from the evaluating authority computer to the computer at the healthcare faculty with the appropriate medical procedure and regimen for treating and monitoring patients classified as "not at risk", "at risk" and assessed as "no indication for operation" or "clinical indication for operation" at the healthcare facility,
 - receiving and storing patient treatment and progress data in the
 memory of the computer at the healthcare facility to provide "not at risk"
 patients without limb ulcers routine care and precautions at the
 healthcare facility, "not at risk" patients with limb ulcers routine wound
 care at the healthcare facility and providing "not at risk" patients with
 limb ulcers periodic reevaluation by the evaluating authority,
 - entering and storing the periodic patient reevaluations in the memory of the computer at the evaluating authority to provide "at risk" patients assessed as "no indication for operation" or "operation not elected by patient", and "clinical indication for operation" patient undergoing revascularization at the vascular surgery facility with intensive wound care at the healthcare facility,
 - entering and storing patient treatment and evaluation of patients in the memory of the computer at the vascular surgery facility,
 - transmitting the patient treatment and evaluation data of patients from the vascular surgery facility to the healthcare facility,
 - receiving and storing the patient treatment and evaluation data of patients in the computer at the healthcare facility,
 - recording periodic reevaluations of "at risk" patients data assessed as "no indication for operation" or "operation not elected by patient" with increased precautions at the healthcare facility.